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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,900	08/21/2003	Richard Duncan	003797.00620	6418

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EXAMINER	
SAIN, GAUTAM	

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/644,900	DUNCAN ET AL.	
	Examiner	Art Unit	
	Gautam Sain	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 August 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-10,12-21,24,26,27,34-37,39-43,45-53,56 and 58* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4, 6-10, 12-21, 24, 26, 27, 34-37, 39-43, 45-53, 56 and 58* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1) This is a Final rejection in response to amendments/remarks filed on 9/21/2006.

2) Claims 1-4, 6-10, 12-21, 24, 26, 27, 34-37, 39-43, 45-53, 56 and 58 are rejected. Claims 28-33 and 59-65 were previously withdrawn. Claims 5, 11, 22-23, 38, 44, 54, 55 and 57 are cancelled.

3) Effective filing date is 8/21/2003.

4) Assignee is Microsoft.

5) Examiner withdraws rejection under 35 USC 101.

Claim Rejections - 35 USC § 102

6) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6-1) Claims 1-4, 6-10, 12-21, 24, 26, 27, 34-37, 39-43, 45-53, 56 and 58 are rejected under 35 U.S.C. 102(e) as being anticipated by Schilit et al (US 6687876, filed Dec 30, 1998).

Regarding independent claims 1 and 34, Schilit teaches *creating a first context node associated with a first portion of a base portion of an electronic document; creating a second context node associated with an annotation to the base portion, wherein the first context node and the second context node are arranged in a single hierarchical data structure representing data associated with the electronic document; and linking the*

second context node with the first context node. Schilit discloses a method for maintaining freeform ink annotations on changing views (Title), where layout relationships between the annotations and the associated objects are maintained (col 2, lines 57- 65) where a user using a hyperbolic browser makes a digital ink annotation on a node of a tree (col 3, lines 3-6; col 4, lines 45-54)(compare with the claimed first context node). Additionally, the relationship is between the ink annotations and objects in a view in the document (col 4, lines 45-54)(compare with claimed second context node). The system maintains the logical relationship between the freeform digital annotation and the object (col 4, lines 50-54)(compare with claimed the claimed linking) and maps the annotation to the text objects that they are on (col 7, lines 55-60). Regarding the hierarchical amendment, Schilit discloses mapping that may be to hierarchical object structures such as characters, phrases and paragraphs with mapping of annotations and characters or positions between characters (col 8, lines 29-36), where the hierarchical object structure can be applied to electronic book that comprises chapters, paragraphs, sentences, phrases, words, etc. (col 15, lines 23-40). The electronic book implies the book has subparts (ie., chapters, pages, ...) where the book and it's subparts form a single hierarchical structure.

Regarding claims 2 and 35, Schilit teaches the first context node a word node. Schilit discloses annotated word (col 7, lines 30-32).

Regarding claims 3, 20, 36 and 52, Schilit teaches wherein the first context node an ink drawing node. Schilit discloses annotations that are circles, margin notes, underlines/cross-outs (col 7, lines 50-57).

Regarding claims 4 and 37, Schilit teaches second context node is a group node. Schilit discloses grouping ink strokes on text to form a single freeform digital ink annotation (col 7, lines 48-51).

Regarding claims 6 and 39, Schilit teaches the base portion is electronic text. Schilit discloses underlying text objects (col 4, line 67-col 5, line 1) and object are the text characters (col 5, lines 30-34; Fig 3A; 3B).

Regarding claims 7 and 40, parsing at least the first portion of the base portion to thereby identify information for inclusion in the first context node. The Examiner interprets this claim limitation to mean parsing performed as a classification process to identify a stroke type, specifically to determine whether an electronic ink stroke is part of a drawing or handwritten text, in order to group ink strokes into meaningful associations such as lines, words and paragraphs (see specification, page 2, paragraph 4). Schilit discloses a control routine that groups ink strokes into various categories (col 10, lines 15-20), by acquiring the region in the view that corresponds to the current character (col 10, lines 65-67) and acquires a position corresponding to the current character position prior to setting the character position (col 11, lines 30-33), which the Examiner interprets as the same functionality as the claimed limitation.

Regarding claims 8 and 41, Schilit teaches parsing at least the annotation to thereby identify information for inclusion in the second context node. Schilit discloses, by acquiring the region in the view that corresponds to the current character (col 10, lines 65-67) and acquires a position corresponding to the current character position prior to setting the character position (col 11, lines 30-33), which the Examiner interprets as the

same functionality as the claimed limitation.

Regarding claims 9 and 42, Schilit teaches prior to parsing the annotation, the annotation includes at least one unclassified ink node. Schilit discloses unanchored segments of the freeform digital ink that will stretch to fit between the anchored points (col 6, lines 15-17), where the process first receives freeform digital ink annotations prior to anchoring them to the view (col 6, lines 46-49).

Regarding claims 10, 24 and 43, Schilit teaches rendering the base portion and the annotation, wherein the annotation is located at a first position with respect to the base portion; changing data associated with the base portion such that a location associated with the first context node changes to a second position; and rendering the annotation and the base portion with the changed data, wherein the annotation is rendered at a third position with respect to the base portion at least in part based on the second position of the first context node.

First, The Examiner interprets this claim to mean changing the location of a base portion of the document that has attached ink annotations to another location and maintaining the logical connection of the ink annotation to the changed base portion of the changed portion in it's new location.

Schilit discloses a method that moves the anchor points if the underlying anchored object moves (col 6, lines 13-14) where the document view is updated when the document changes and the maintained mapping of the ink annotation is used to render the ink annotation on the changed object view (col 6, lines 60-63). The logical relationship between freeform digital ink annotation and the objects is maintained (col 3,

line 10-13) and the objects can be copied or moved along with the logical relationship with the annotation (col 3, lines 17-34).

Regarding claims 12 and 45, Schilit teaches the first context node and the second context node share at least one common parent node. Schilit discloses that the annotation flows along with the underlying text objects in a logical relationship (col 4, line 66 – col 5, line 3). The Examiner interprets the annotation and text object are in a parent child relationship because the text object is under the annotation.

Regarding claims 13 and 46, Schilit teaches data associated with the first context node and the second context node enable the electronic document to be rendered such that the annotation contains the first portion of the base document. Schilit teaches a circle annotation that is anchored to the span of words that is encircled by the circle (col 5, lines 49-52; Fig 3A, item 68).

Regarding claims 14 and 47, Schilit teaches data associated with the first context node and the second context node enable the electronic document to be rendered such that the annotation underlines the first portion of the base document. Schilit discloses underline annotations underneath the text and are mapped to the text objects that they are underneath 9col 7, lines 55-60).

Regarding claims 15 and 48, Schilit teaches data associated with the first context node and the second context node enable the electronic document to be rendered such that the annotation strikes out the first portion of the base document. Schilit discloses cross-out annotations directly on the text and are mapped to the text objects that they are on (col 7, lines 55-60).

Regarding claims 16 and 49, Schilit teaches data associated with the first context node and the second context node enable the electronic document to be rendered such that a first portion of the annotation points between a second portion of the annotation and the first portion of the base document. Schilit teaches (see Fig 3A) a document having digital ink annotations (item 56) that includes a circle connected to an arrow where the tip of the arrow is anchored to it's end point while the line connecting the circle and the tip of the arrow is not anchored (col 5, lines 48-53). The Examiner interprets that the tip of the arrow points to another portion of the document that is between the annotation (the circle 68) and the base document (item 66).

Regarding claims 17 and 27, Schilit teaches a computer-executable instructions stored thereon for performing the method of claim 1. Schilit discloses a programmed general purpose computer to implement the system (col 4, lines 18-28).

Regarding independent claims 18 and 50, Schilit teaches *first data set containing data associated with a base document; a second data set that includes unclassified electronic ink data; storing results from parsing the second data set as a data structure on a computer readable medium, wherein the first context node and the second context node are arranged in a single hierarchical data structure representing data associated with the electronic document and linking at least some portion of the second data set with at least some portion of the first data set.* Schilit discloses a method for maintaining freeform ink annotations on changing views (Title), where layout relationships between the annotations and the associated objects are maintained (col 2, lines 57- 65) where a user using a hyperbolic browser makes a digital ink annotation on

a node of a tree (col 3, lines 3-6; col 4, lines 45-54)(compare with the claimed first context node). Additionally, the relationship is between the ink annotations and objects in a view in the document (col 4, lines 45-54)(compare with claimed second context node). The system maintains the logical relationship between the freeform digital annotation and the object (col 4, lines 50-54)(compare with claimed the claimed linking) and maps the annotation to the text objects that they are on (col 7, lines 55-60). Schilit's method invention is based upon the concept that anchors are determined for freeform digital ink annotations and the text editor stores the sequence and presentation of characters (col 8, lines 43-45).

For the parsing portion of the limitation, The Examiner interprets this claim limitation to mean parsing performed as a classification process to identify a stroke type, specifically to determine whether an electronic ink stroke is part of a drawing or handwritten text, in order to group ink strokes into meaningful associations such as lines, words and paragraphs (see specification, page 2, paragraph 4). Schilit discloses a control routine that groups ink strokes into various categories (col 10, lines 15-20), by acquiring the region in the view that corresponds to the current character (col 10, lines 65-67) and acquires a position corresponding to the current character position prior to setting the character position (col 11, lines 30-33), which the Examiner interprets as the same functionality as the claimed limitation.

Regarding claims 19 and 51, Schilit teaches the first context node a text word node. Schilit discloses annotated word (col 7, lines 30-32).

Regarding claims 21 and 53, Schilit teaches during the linking, the first context node of

the first parsed data set is linked with the first context node of the second parsed data set. Schilit discloses a logical mapping relationship between the ink annotations and the text object of the document (col 4, lines 50-54; col 6, lines 45-50).

Regarding claim 56, which claims substantially similar subject matter as claim 24 and is rejected under similar lines of rejection as the rejection of claim 24, above.

Regarding claims 26 and 58, Schilit teaches at least one context node associated with the first data set shares at least one common parent node with at least one context node associated with the second data set. Schilit discloses that the annotation flows along with the underlying text objects in a logical relationship (col 4, line 66 – col 5, line 3). The Examiner interprets the annotation and text object are in a parent child relationship because the text object is under the annotation.

Response to Arguments

Applicant's arguments filed 8/21/2006 have been fully considered but they are not persuasive. Regarding claim 1 and 34, Applicant argues that Schilit does not teach the amended limitations dealing with a single hierarchical data structure representing data associated with the electronic document (Remarks, page 16). The examiner disagrees. Specifically, Schilit discloses mapping that may be to hierarchical object structures such as characters, phrases and paragraphs with mapping of annotations and characters or positions between characters (col 8, lines 29-36), where the hierarchical object structure can be applied to electronic book that comprises chapters, paragraphs, sentences, phrases, words, etc. (col 15, lines 23-40). The electronic book implies the book has subparts (ie., chapters, pages, ...) where the book and it's subparts form a single

hierarchical structure.

Regarding claims 18 and 50, applicant argues that Shilit does not teach the amended limitation of storing from parsing two data sets as a data structure (Remarks, page 16, bottom – 17). The examiner disagrees. Specifically, Schilit's system maintains the logical relationship between the freeform digital annotation and the object (col 4, lines 50-54)(compare with claimed the claimed linking) and maps the annotation to the text objects that they are on (col 7, lines 55-60). Schilit's method invention is based upon the concept that anchors are determined for freeform digital ink annotations and the text editor stores the sequence and presentation of characters (col 8, lines 43-45).

Relevant Art Considered by not cited

Nonpatent Literature "Robust Annotation Positioning in Digital Documents" by A.J. Bernheim Brush, David Bargeron, Anoop Gupta and JJ Cadiz (see IDS, 4/2006).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam Sain whose telephone number is 571-272-4096. The examiner can normally be reached on M-F 9-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CS
GS 11/13/06

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